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INFORMATION DISCLOSURE

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SHEET 1 OF 6

| 10/814,966 |
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| March 30, 2004 |
| Koller, et al. |
| 1651 |
| Susan Marie Hanley |
| ONCOSIS.001CP5 |
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| | | | U.S. PATENT | DOCUMENTS | |
|----------------------|------------------------|---|--------------------------------|-------------------------------|---|
| Examiner Initials | Cite No. | Document Number Number - Kind Code (if known) Example: 1,234,567 B1 | Publication Date MM-DD-YYYY | Name of Patentee or Applicant | . Pages, Columns, Lines Where Relevant Passages or Relevan Figures Appear |
| SH | SH 1 US 2002/076744 A1 | | 06-20-2002 | Koller et al. | |
| | 2 | US 2003/0219892 | 11-27-2003 | Palsson et al. | |
| | 3 | 3,674,926 | 07/04/72 | Dewey et al. | |
| | 4 | 4,284,897 | 08/18/81 | Sawamura et al. | |
| | 5 | 4,395,397 | 07/26/83 | Shapiro | |
| | 6 | 4,532,402 | 06/30/85 | Overbeck | |
| | 7 | 4,624,915 | 11/25/86 | Schindler et al. | |
| | 8 | 4,629,687 | 12/16/86 | Schindler et al. | |
| | 9 | 4,803,992 | 02/14/89 | Lemelson | |
| | 10 | 5,013,660 | 05/07/91 | Kasuya et al. | |
| | 11 | 5,035,693 | 07/30/91 | Kratzer et al. | |
| | 12 | 5,053,693 | 10/01/91 | Bohnert et al. | |
| _ | 13 | 5,089,384 | 02/18/92 | Hale | |
| 1 | 14 | 5,103,660 | 04/14/92 | Johnson | |
| <u> </u> | 15 | 5,158,889 | 10/27/92 | Hirako et al. | |
| | 16 | 5,188,633 | 02/23/93 | Kratzer et al. | |
| | 17 | 5,202,230 | 04-13-1993 | Kamentsky, Louis A. | |
| | 18 | 5,272,081 | 12/21/93 | Weinreb et al. | |
| | 19 | 5,296,963 | 03/22/94 | Murakami et al. | |
| | 20 | 5,298,963 | 03/29/94 | Moriya et al. | |
| | 21 | 5,381,224 | 01/10/95 | Dixon et al. | · · · · · · · · · · · · · · · · · · · |
| | 22 | 5,523,543 | 06/04/96 | Hunter, Jr. et al. | |
| | 23 | 5,422,720 | 06-06-1995 | Berndt, Klaus W | |
| | 24 | 5,646,411 | 07/08/97 | Kain et al. | |
| - - - | 25 | 5,672,880 | 09/30/97 | Kain | |
| | 26 | 5,690,846 | 11/25/97 | Okada et al. | |
| | 27 | 5,719,391 | 02/17/98 | Kain | |
| Ψ^- | 28 | 5,785,703 | 07/28/98 | Goodman et al. | |
| SH | 29 | 5,795,755 | 08/18/98 | Lemelson | |

| Examiner Signature | /Susan Hanley/ | (09/25/2006) | Date Considered |
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| SHEET 2 OF 6 | Attorney Docket No. | ONCOSIS.001CP5 |

| | | | U.S. PATENT | DOCUMENTS | |
|----------------------|-------------|---|--------------------------------|-------------------------------|--|
| Examiner Initials | Cite No. | Document Number Number - Kind Code (if known) Example: 1,234,557 B1 | Publication Date MM-DD-YYYY | Name of Patentee or Applicant | Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear |
| SH | 30 | 5,874,266 | 02/23/99 | Palsson | |
| | 31 | 5,890,846 | 04/06/99 | Clark et al. | |
| | 32 | 5,932,872 | 08/03/99 | Price | |
| | 33 | 6,005,256 | 12/21/99 | McGlynn et al. | |
| | 34 | 6,007,814 | 12/28/99 | Scheinberg | , |
| | 35 | 6,040,139 | 03/21/00 | Bova | |
| | 36 | 6,122,396 | 09/19/00 | King et al. | |
| | 37 | 6,143,535 | 11/07/00 | Palsson | • |
| | 38 | 6,148,096 | 11/14/00 | Pressman et al. | |
| | 39 | 6,315,772 | 11-13-2001 | Marchitto et al. | |
| | 40 | 6,381,224 | 04/30/02 | Lane et al. | |
| | 41 | 6,424,863 | 07-23-2002 | Flock, Stephen T. | |
| V | 42 | 6,642,018 | 11-04-2003 | Koller et al. | |
| SH | 43 | 6,753,161 | 06-22-2004 | Koller et al. | , |

| | | | | FOREIGN PATI | ENT DOCUMENTS | | |
|---------------|----|-------------|--|-----------------------------------|----------------------------------|--|------|
| Exam Initi | | Cite No. | Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1 | Publication Date MM-DD-YYYY | Name of Patentee or Applicant | Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear | τ¹ . |
| SH | | 44 | EP 0 662 512 | 07/12/95 | Europe | | |
| | | 45 | JP 63-259465 | 04/17/87 | Japan | | |
| | •• | 46 | WO 97/11156 | 03-27-1997 | BOVA, G., Steven | | |
| | | 47 | WO 98/42356 | 10-01-1998 | PALSSON, Bernhard | | |
| abla | , | 48 | WO 89/01630 | 02/23/89 | РСТ | | |
| 4 | / | 49 | WO 98/52016 | 11/19/98 | PCT | | |
| SI | Ŧ | 50 | RU 2054486C1 | 02-20-1996 | PETUKHOV VALERIJ | | |

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| Examiner Signature | /Susan Hanley/ | (09/25/2006) | Date Considered | |

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| | | NON PATENT LITERATURE DOCUMENTS | |
|---------------------|------|---|----------------|
| Examine Initials | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ¹ |
| SH | 51 | Andersen et al., "Failure of immunologic purging in mantle cell lymphoma assessed by polymerase chain reaction detection in minimal residual disease," Blood, 90: 4212-4221 (1997) | <u> </u> |
| | 52 | Brittberg et al., "Treatment of deep cartilage defects in the knee with autologous chondrocyte transplantation," N.E.J.Med., 331: 889-895 (1994) | |
| | 53 | Brockstein et al., "Tumor cell contamination of bone marrow harvest products: Clinical consequences in a cohort of advanced-stage breast cancer patients undergoing high-dose chemotherapy," J. Hematotherapy, 5: 617-624 (1996) | |
| . | 54 | Brugger et al., "Mobilization of Tumor Cells and Hematopoietic Progenitor Cells Into Peripheral Blood of Patients with Solid Tumors," Blood, 83: 636-640 (1994) | |
| | 55 | Campana et al., "Detection of Minimal Residual Disease in Acute Leukemia: Methodological Advances and Clinical Significance," Blood, 85: 1416-1434 (1995) | |
| | 56 | Chute et al., "Analysis of the steady-state dynamics organelle motion in cultured neurities," Clin Exp Pharmco Physiol, 22: 360 (1995) | |
| | 57 | Clarke et al., "A recombinant <i>bcl-x_s</i> adenovirus selectively induces apoptosis in cancer cells but not in normal bone marrow cells," <i>Proc. Natl. Acad. Sci. USA</i> , 92: 11024-11028 (1995) | |
| | 58 | Cossman et al., "Reed-Sternberg cell genome expression supports a B-cell lineage," <i>Blood</i> , 94: 411-416 (1999) | |
| | 59 | Deisseroth et al., "Genetic marking shows that Ph* cells present in autologous transplants of chronic myelogenous leukemia (CML) contribute to relapse after autologous bone marrow in CML," <i>Blood</i> ,83: 3068-3076 (1994) | |
| | 60 | Dooley et al., "A Novel, Inexpensive Technique for the Removal of Breast Cancer Cells from Mobilized Peripheral Blood Stem Cell Products," <i>Blood</i> , 88: 252a, Abstract 995, 438-11 (1996) | |
| | 61 | Elbashir, et al. "Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells." Nature, 411: 494-498 (2001). | |
| | 62 | Fields et al., "Clinical significance of bone marrow metastases as detected using the polymerase chain reaction in patients with breast cancer undergoing high-dose chemotherapy and autologous bone marrow transplantation," <i>J. Clin. Oncol.</i> , 14: 1868-1876 (1996) | |
| | 63 | Gazitt et al., "Purified CD34*Lin Thy* Stem Cells Do Not Contain Clonal Myeloma Cells," Blood, 86: 381-389 (1995) | |
| | 64 | Gee, Adrian P., "Part 5: Autologous Bone Marrow Purging," Bone Marrow Processing and Purging,248-328 (1991) | • |
| | 65 | Grate et al., "Laser-mediated, site-specific inactivation of RNA transcripts, <i>PNAS</i> , 96: 6131-6136 (1999) | |
| | / 66 | Greer et al., "A Clonogenic Culture Method for the Identification of Breast Cancer Cells in Marrow Aspirates of Patients Receiving High-Dose Chemotherapy," Blood, 88: 252a, Abstract 996, 439-II (1996) | |
| SI | H 67 | Gribben et al., "Antibody-mediated Purging; Bone Marrow Transplantation," Boston-Blackwell Scientific Publications, 149-163 (1994) | |

| Examiner Signature | /Susan Hanley/ | (09/25/2006) | Date Considered | |
|--------------------|---|--------------|---|-------------------------|
| | erence considered, whethe t considered. Include copy | | formance with MPEP 609. Draw line mmunication to applicant. | through citation if not |

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|----------------------|-------------|--|----------------|
| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ¹ |
| SH | 68 | Gribben et al., "Immunologic purging of marrow assessed by PCR before autologous bone marrow transplantation for B-cell lymphoma," <i>N.E.J. Med.</i> , 325: 1525-1533 (1991) | |
| | 69 | Gulati et al., "Rationale for Purging in Autologous Stem Cell Transplantation," Journal of Hernatotherapy, 2: 467-471 (1993) | |
| | 70 | Guo et al., "Laser-mediated gene transfer in rice," Physiologia Plantarum, 93: 19-24 (1995) | • |
| | 71 | Han, et al. "Quantum-dot-tagged microbeads for multiplexed optical coding of biomolecules." Nat.Biotech., 19: 631-635 (2001). | |
| | 72 | Hanania et al., "A Novel Automated Method of Scanning Cytometry and Laser-Induced Necrosis applied to Tumor Cell Purging," Abstract #2836, BLOOD, Journal of the American Society of Hematology, Forty-First Annual Meeting, 3pages (December 3-7, 1999) | |
| | 73 | Huang et al., "Symmetry of initial cell divisions among primitive hematopoietic progenitors is independent of ontogenic age and regulatory molecules," <i>Blood</i> , 94: 2595-2604 (1999) | |
| | 74 | International Search Report from PCT/US01/07506 | |
| | 75 | International Search Report from PCT/US00/32742 | |
| | 76 | Jasuja et al., "Chemotactic responses of <i>Escherichia coli</i> to small jumps of photoreleased L-aspartate," <i>Biophysical Journal</i> , 76: 1706-1719 (1999) | |
| | 77 | Jay, D. G., "Selective destruction of protein function by chromophore-assisted laser inactivation," PNAS, 85: 5454-5458 (1988) | |
| | 78 | Koller et al., "Tissue Culture Surface Characteristics Influence the Expansion of Human Bone Marrow Cells," <i>Biomaterials</i> , 19: 1963-1972 (1998) | |
| | 79 | Krasieva, et al. "Mechanisms of cell permeabilization by laser microirradiation." Proc.SPIE, 3260: 38-44 (1998). | |
| | 80 | Kurata, et al. "The laser method for efficient introduction of foreign DNA into cultured cells." Exp.Cell Res., 162: 372-378 (1986). | |
| | 81 | Langer et al., "The challenges ahead," Sci. Am., 280: 86-89 (1999) | |
| | 82 | Lazarus et al., "Does In Vitro Bone Marrow Purging Improve the Outcome after Autologous Bone Marrow Transplantation?," Journal of Hematotherapy, 2: 457-466 (1993) | |
| | 83 | Lydaki et al., "Merocyanine 540 mediated photolysis of normal bone marrow, committed hemopoietic progenitors and neoplastic cells. Implications for bone marrow purging," <i>Leukemia Research</i> , 21: 641-650 | |
| | 84 | Lydaki et al., "Merocyanine 540 mediated photoirradiation of leukemic cells. In vitro inference on cell survival," <i>Journal of Photochemistry and Photobiology B: Biology</i> , 32: 27-32 (1996) | |
| SH | 85 | Mapara et al., "Monitoring of tumor cell purging after highly efficient immunomagnetic selection of CD34 cells from leukapheresis products in breast cancer patients: Comparison of immunocytochemical tumor cell staining and reverse transcriptase-polymerase chain reaction," <i>Blood</i> , 89: 337-344 (1997) | |

| Examiner Signature | /Susan Hanley/ | (09/25/2006) | Date Considered | |
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| | | NON PATENT LITERATURE DOCUMENTS | |
|-------------------------|-----|--|----|
| Examiner Initials | | | т¹ |
| SH | 86 | Merriam-Webster, Online Dictionary definition of "image". From www.m-w.com, accessed 9/14/05. 2 pages. | _ |
| | 87 | Miller et al., "Rapid Killing of Single Neurons by Irradiation of Intracellular Injected Dye," Science, 206: 702-704 (1979) | |
| | 88 | Niemz, M. H., "Laser-tissue interactions: Fundamentals and applications," Springer-Verlag, (1996) | |
| | 89 | Nilius, et al. "A novel type of cardiac calcium channel in ventricular cells." Nature, 316: 443-6 (1985) | |
| | 90 | Oh et al., "Phototoxicity of the Fluorescent Membrance Dyes PKH2 and PKH26 on the Human Hematopoietic KG1a Progenitor Cell Line," Cytometry, 36: 312-318 (1999) | |
| | 91 | Oleinick et al., "The Photobiology of photodynamic therapy: Cellular targets and mechanisms," Rad. Res., 150: S146-S156 (1998) | |
| | 92 | Palumbo et al., "Targeted gene transfer in eukaryotic cells by dye-assisted laser optoporation," <i>J. Photochem. Photobiol.</i> , 36: 41-46 (1996) | |
| | 93 | Paulus et al., "Purging peripheral blood progenitor cell grafts from lymphoma cells: Quantitative comparison of immunomagnetic CD34* selection systems," Stem Cells, 15: 297-304 (1997) | |
| | 94 | Pedersen, R. A., "Embryonic stem cells for medicine," Sci. Amer., 280: 68-73 (1999) | |
| | 95 | Photonic Instruments, Inc.; Micro Point-Laser System for Bio-Medical and Life Sciences; Product Information Sheet, Apr. 1996 | |
| | 96 | Rill et al., "Direct Demonstration that Autologous Bone Marrow Transplantation for Solid Tumors Can Return a Multiplicity of Tumorigenic Cells," <i>Blood</i> , ; 84: 380-383 (1994) | |
| | 97 | Rowley, Scott D., "Pharmacological Purging of Malignant Cells; Bone Marrow Transplantation," Boston-Blackwell Scientific Publications, 164-178 (1994) | |
| | 98 | Sagi, et al. "Gene delivery into prostate cancer cells by holmium laser application." Prostate Cancer and Prostatic Diseases, 6: 127-130 (2003). | |
| | 99 | Schulze et al., "Tumor cell contamination of peripheral blood stem cell transplants and bone marrow in high-risk breast cancer patients," <i>Bone Marrow Transplant.</i> , 19: 1223-1228 (1997) | |
| | 100 | Schutze et al., "Identification of expressed genes by laser-mediated manipulation of single cells," Nature Biotechnol., 16: 737-742 (1998) | |
| | 101 | Shirahata, et al. "New technique for gene transfection using laser irradiation." J.Invest.Med., 49: 184-190 (2001). | |
| | 102 | Sharp et al., "Significance of detection of occult Non-Hodgkin's Lymphoma in histologically uninvolved bone marrow by a culture technique, <i>Blood</i> , 79: 1074-1080 (1992) | |
| $\overline{\mathbf{V}}$ | 103 | Sharp et al., "Outcome of high-dose therapy and autologous transplantation in non-Hodgkin's lymphoma based on the presence of tumor in the marrow or infused hematopoietic harvest," <i>J. Clin. Oncol.</i> , 14: 214-219 (1996) | |
| SH | 104 | Soughayer, et al. "Characterization of cellular optoporation with distance." Anal.Chem., 72: 1342-1347 (2000). | |

| Examiner Signature | /Susan Hanley/ | (09/25/2006) | Date Considered |
|--------------------|----------------|--------------|---|
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| | | 105 | Tao, et al. "Direct gene transfer into human cultured cells facilitated by laser micropuncture of the cell membrane." PNAS, 84: 4180-4184 (1987). | |
| | | 106 | Theocharous et al., "The Detection and Genetic Analysis of Low Frequency Epithelial Tumor Cells in Patients with Breast Cancer," Blood, 88: 252a, Abstract 998, 441-II (1996) | |
| | | 107 | Thomas et al., "Direct Purging of Breast Carcinoma Cells with Anti-CD24 and/or Anti-Breast Carcinoma Antibodies Using a Novel Immunomagnetic Cell Depletion System," <i>Blood</i> , 88: 252a, Abstract 997, 440-II (1996) | - |
| | | 108 | Tirlapur, et al. "Targeted transfection by femtosecond laser." Nature, 418: 290-291 (2002). | |
| | | 109 | Tricot et al., "CD34*Thy*lin* peripheral blood stem cells (PBSC) effect timely trilineage engraftment in multiple Myeloma (MM), <i>Blood</i> , 86: 293a-0 (1995) | |
| | | 110 | Tsukakoshi, et al. "A novel method of DNA transfection by laser microbeam cell surgery." Appl. Phys. B. 35: 135-140 (1984). | |
| | | 111 | Vannucchi et al., "Evaluation of breast Tumor cell contamination in the bone marrow and leukapheresis collections by RT-PCR for cytokeratin-19 mRNA," <i>Br. J. Haematol</i> , 103: 610-617 (1998) | |
| \ | | 112 | Vervoordeldonk et al., "PCR-positivity in harvested bone marrow predicts relapse after transplantation with autologous purged bone marrow in children in second remission of precursor B-cell acute leukemia, Br. J. Haematol., 96: 395-402 (1997) | |
| | SH | 113 | Vredenburgh et al., "The significance of tumor contamination in the bone marrow from high-risk primary breast cancer patients treated with high-dose chemotherapy and hematopoietice support," <i>Biol. Blood Marrow Transplant.</i> , 3: 91-97 (1997) | |

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Examiner Signature /Susan Hanley/ (09/25/2006) Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.